

**Notice of Allowability**

Application No.

09/779,528

Examiner

Gary C. Vieaux

Applicant(s)

SUZUKI ET AL.

Art Unit

2612

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/12/2004.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## DETAILED ACTION

### ***Applicant's Amendment***

The Amendment filed on October 12, 2004 has been received and made of  
5 record. In response to the first office action, the title, as well as claims 1-4, 6, 13, and  
14 have been amended.

### Claim Amendments

**Claims 1, 2, and 3** were amended to provide proper antecedent basis for "said  
10 output signal line", and therefore the objections to claims 2 and 3 are hereby withdrawn.

**Claims 13 and 14** were amended to correctly spell "converter", and therefore the  
objections to claims 13 and 14 are hereby withdrawn.

**Claim 3** was also amended to particularly point out and distinctly claim the  
subject matter to which the claim is directed, and therefore the rejection to claim 3 is  
15 hereby withdrawn.

### Title Amendment

The title of the invention was amended to better reflect the invention to which the  
claims are directed. The title, as amended, although more indicative of the invention to  
20 which the claims are directed, was determined by the Examiner of Record to be  
insufficient, and therefore the title is changed by Examiner's Amendment to more clearly  
indicate the invention to which the claims are directed, as provided infra.

***Examiner's Amendment***

An examiner's amendment to the record appears below.

The title is amended to now read:

**MOS TYPE IMAGE PICKUP DEVICE HAVING PIXEL INTERLEAVED ARRAY**

**5 LAYOUT AND ONE ANALOG TO DIGITAL CONVERSION UNIT PROVIDED PER  
EACH PAIR OF ADJACENT PHOTOELECTRIC CONVERSION COLUMNS**

***Allowable Subject Matter***

**Claims 1-18** are allowed.

10 The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art is not found to teach or fairly suggest, in combination with the existing elements of the present claim as currently amended, a solid-state image pickup device comprising an interleaved pixel layout in which an analog-to-digital unit, comprising a common sample/hold circuit and a common analog-  
15 to-digital converter, is provided per each set of adjacent photoelectric conversion element columns.

Regarding claims 2-18, the prior art is not found to teach or fairly suggest, the elements of the individual claims in combination with the claims from which dependence is derived (see Reasons for Allowance to claim 1 supra.)

20 Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably


accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Contact**

5 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary C. Vieaux whose telephone number is 703-305-9573 until March 1, 2005, and 571-272-7318 afterwards. The examiner can normally be reached during his normal office hours, which are Monday - Friday, 8:00am - 4:00pm, with alternating Fridays off.

10 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber (SPE 2612) can be reached at 703-305-4929 until March 1, 2005, and at 571-272-7308 afterwards. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the  
15 Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic  
20 Business Center (EBC) at 866-217-9197 (toll-free).

  
WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

Gary C. Vieaux  
Examiner  
Art Unit 2612